

PV Shelf Site Chronology

Date	Event
1953 - 1971	Montrose discharges DDT-contaminated wastes from its Torrance plant to sanitary sewers operated by the Sanitation Districts. Effluent containing DDTs and other industrial pollutants is released to the environment through ocean outfalls off White Point on the Palos Verdes Peninsula.
October 1989	EPA adds Montrose's Normandie Avenue facility to the National Priorities List.
1995	EPA began evaluating PV Shelf site
July 1996	EPA initiates Non-Time-Critical Removal Action to evaluate risks posed by DDT and PCB effluent-affected sediment at PV Shelf and the feasibility of response actions that could reduce threats to human health and the environment.
1999	EPA issues human health risk assessment and concludes that consumption of fish caught from PV Shelf poses a health risk due to high levels of chemicals of concern, i.e., DDTs and PCBs. EPA estimates excess cancers impacting 1 in 500 fisherman. (2×10^{-3} risk)
March 2000	EPA issues the Engineering Evaluation/Cost Analysis for PV Shelf, identifying institutional controls as the preferred alternative
September 2000	EPA conducts pilot study to assess the feasibility of using capping as a remedial alternative.
September 2001	EPA issues the Action Memorandum that initiates implementation of the institutional controls program (Public Outreach/Education, Enforcement, and Monitoring)
September 2009	EPA signs Interim ROD which improves ICs, formalizes Monitored Natural Recovery (MNR) as a remedial component, and employs a sediment cap over most contaminated areas. The remedy is "interim" so EPA can evaluate if additional actions are necessary to reach cleanup levels.
2009	EPA continues to plan and conduct technical studies with the support and concurrence of the Palos Verdes Shelf Technical Exchange Group
2013	EPA issues the Revised Final Data Report for the Fall 2009 Sediment Sampling Program, prompting discussion about suspending design and implementation of cap remedy
2014	EPA issues First Five-Year Review Report - latest studies and the commercial fishing and market restaurant inspections indicate that risks to subsistence anglers from eating DDTs and PCBs contaminated white croakers harvested from the PV Shelf area have decreased and contaminated white croakers from the PV Shelf area are not being sold at restaurant and retail markets.
2018	EPA Issues the First Monitored Natural Recovery (MNR) Study, indicating degradation of DDTs and PCBs in sediments on the ocean floor of the PV Shelf site area, thus significantly altering our estimates of the mass of contaminated sediment, prompting EPA to suspend hot spot capping efforts and initiate efforts to conduct in new FS in support of the final remedy.
2020	EPA expected to award contract for development of a new FS to support the selection of a final remedy for PV Shelf. The FS will update our understanding of the relationship between sediment and fish contamination, update the human health and ecological risk assessments, and reevaluate cleanup alternatives using data collected since the 2009 IROD.
2024	FS expected to be complete
2026	Final ROD expected to be signed

Southern California Bight Ocean Dumping (from 1973 SCCWRP Rpt.)

- 1) Approved (RWQCB,USACOE) ocean disposal of eight types of waste occurred at disposal sites in the Southern California Bight from 1931 to early 1970's
- 2) @ 13 ocean disposal sites were located in the Southern California Bight during this period
- 3) Chemical wastes were disposed at sites 2, 3 and 4
- 4) @2.8 million tons of chemical wastes were disposed of at sites 2 and 3 (SCCWRP est.)
@5.7 million tons of chemical wastes were disposed of at site 4 (SCCWRP est.)

Montrose Chemical Corporation – Torrance DDT Production Plan

Acid waste from Montrose DDT production was sent for Ocean disposal from the late 1950's to mid-late 1960's (JL recollection)

Dumping locations included sites 2 or 3 and site 4

CERCLA Natural Resource Trustees Damage Assessment originally included damage from the dump sites (1990 – 1994/5). However, NRD Trustees case was narrowed to focus on impacts of DDT and PCBs in Palos Verdes Shelf sediments in the mid-1990's.

EPA Superfund began evaluating Palos Verdes Shelf beginning in 1995. Other than litigation support to the NRD Trustees, EPA Superfund has not looked at the disposal sites used by Montrose.

The NRD Trustees (NOAA, DOI and the State of California) continue to operate the Montrose Settlements Restoration Program although we believe settlement funds have already been expended.